CLAIMS

1. A compound of formula I

$$\mathbb{R}^2$$
 \mathbb{R}^3
 \mathbb{R}^1

in free or salt form, where

 R^1 is a monovalent aromatic group having up to 10 carbon atoms, and R^2 and R^3 together with the nitrogen atom to which they are attached denote a heterocyclic group having up to 10 ring atoms and having 1 to 4 hetero atoms in the ring system.

2. A compound according to claim 1, in which

 R^1 is phenyl substituted by one or two substituents selected from cyano, halogen, carboxy or C_1 - C_4 -haloalkoxy, and optionally by C_1 - C_4 -alkyl or C_1 - C_4 -alkoxy, or R^1 is phenyl substituted by C_1 - C_4 -alkoxy, and

R² and R³ together with the nitrogen atom to which they are attached denote a heterocyclic group having up to 6 ring atoms and one or two hetero atoms in the ring.

3. A compound according to claim 1, in which

R¹ is phenyl substituted by one or two substituents selected from cyano, halogen, carboxy or C¹-C⁴-haloalkoxy meta to the indicated naphthyridine ring and optionally by C¹-C⁴-alkyl or C¹-C⁴-alkoxy ortho to the indicated naphthyridine ring, or R¹ is phenyl substituted by C¹-C⁴-alkoxy meta to the indicated naphthyridine ring, and

R² and R³ together with the nitrogen atom to which they are attached denote a heterocyclyl group having up to 6 ring atoms and one or two nitrogen atoms, or one nitrogen atom and one oxygen atom, in the ring, optionally substituted by hydroxy, carboxy, 5-membered Oheterocyclylcarbonyl, aminocarbonyl, C₁-C₄-alkoxycarbonyl, C₁-C₄-alkylsulfonyl or C₁-C₄-alkyl optionally substituted by hydroxy, cyano, carboxy or C₁-C₄-alkoxycarbonyl.

4. A compound according to claim 1 in which

R¹ is phenyl optionally substituted by one, two or three substituents selected from the group consisting of cyano, C₁-C₈-alkyl, C₁-C₈-alkylthio, -SO-C₁-C₈-alkyl, and phenyl fused with a heterocyclic ring having 3 to 8 ring atoms of which up to 4 can be carbon atoms and up to 4 can be hetero atoms, and

R² and R³ together with the nitrogen atom to which they are attached denote a heterocyclic group having up to 6 ring atoms and one or two hetero atoms in the ring optionally substituted by carboxy, carboxy-C₁-C₈-alkoxy or C₁-C₈-alkoxycarbonyl-C₁-C₈-alkoxy, said heterocyclic group also optionally being substituted by C₁-C₈-alkyl or C₁-C₈-alkoxy.

5. A compound according to claim 4, in which

R¹ is phenyl optionally substituted by one, two or three substituents selected from the group consisting of cyano, C₁-C₄-alkyl, C₁-C₄-alkylthio, -SO-C₁-C₄-alkyl, and phenyl fused with a heterocyclic ring having 5 or 6 ring atoms of which up to 4 can be carbon atoms and up to 2 can be hetero atoms, and

R² and R³ together with the nitrogen atom to which they are attached denote a heterocyclic group having up to 6 ring atoms and one or two nitrogen atoms in the ring optionally substituted by carboxy, carboxy- C₁-C₄-alkoxy or C₁-C₄-alkoxycarbonyl-C₁-C₄-alkoxy, said heterocyclic group also optionally being substituted by C₁-C₄-alkyl.

- 6. A compound according to claim 1, which is
- 3-[6-(3-hydroxy-pyrrolidin-1-yl)-[1,7]naphthyridin-8-yl]-benzonitrile;
- 3-{6-[4-(2-cyano-ethyl)-piperazin-1-yl]-[1,7]naphthyridin-8-yl}-benzonitrile;
- 1-[8-(3-cyano-phenyl)-[1,7]naphthyridin-6-yl]-piperidine-4-carboxylic acid, lithium salt; or
- 3-(6-piperazin-1-yl-[1,7]naphthyridin-8-yl)-benzonitrile;
- 1-[8-(3-fluoro-phenyl)-[1,7]naphthyridin-6-yl]-piperidine-4-carboxylic acid ethyl ester; sodium 1-[8-(3-fluoro-phenyl)-[1,7]naphthyridin-6-yl]-piperidine-4-carboxylate;
- 1-[8-(5-fluoro-2-methoxy-phenyl)-[1,7]naphthyridin-6-yl]-piperidine-4-carboxylic acid ethyl ester; or

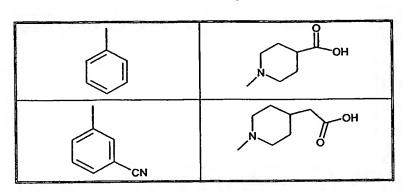
potassium 1-[8-(5-fluoro-2-methoxy-phenyl)-[1,7]naphthyridin-6-yl]-piperidine-4-carboxylate.

7. A compound according to claim 1, wherein R¹ and -NR²R³ are as shown in the following table:

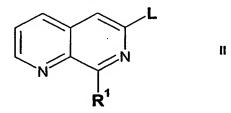
R ¹	NR ² R ³
C _z	NH ₂
C _{≅N}	NOH
C _{₹N}	ОН
C.EN	NOH
C.F.N	HO
C.≅N	N N O
C.≅N	N O NH ₂
C. N	N
C≅N C≅N	NH ₂
C _{₹N}	O OH
C.S.N	N CH ₃
C _{₹N}	N CO ₂ H

<u> </u>	
C _{žN}	HN OC ₂ H ₅
C _{₹N}	SO ₂ CH ₃
C _{EN}	NH CH ₃
C,",N	NH CH ₃
C,",Z	CO₂H
CI	O CH ₃
CH ₃ O CI	CH ₃
OH OH	, N
CI	ОН
CI	CH,
CH3O CI	CH,
CH ₃ O CI	ОН

осн _а	он
F F	ОН
CH3	ОН
CN	N OH
	ОН
OCF ₃	ОН
CI	ОН
CN	OH CH ₃
S-CH ₃	ОН
S CH ₃	ОН



- 8. A compound according to any one of the preceding claims for use as a pharmaceutical.
- 9. A pharmaceutical composition comprising a compound according to any one of claims 1 to 7, optionally together with a pharmaceutically acceptable diluent or carrier.
- 9. Use of a compound according to any one of claims 1 to 7 for the preparation of a medicament for the treatment of a condition mediated by PDE4.
- 10. Use of a compound according to any one of claims 1 to 7 for the preparation of a medicament for the down-regulation or inhibition of TNF-α release.
- 11. Use of a compound according to any one of claims 1 to 7 for the preparation of a medicament for the treatment of an inflammatory disease.
- 12. Use of a compound according to any one of claims 1 to 7 for the preparation of a medicament for the treatment of an obstructive or inflammatory airways disease.
- 13. A process for the preparation of compounds of formula I in free or salt form which comprises
- (iii) (A) reacting a compound of formula



optionally in protected form, where R¹ is as hereinbefore defined and L is a leaving atom or group, for example halogen or an aliphatic or aromatic sulfonyloxy group such as trifluoromethylsulfonyloxy, with a compound of formula

$$H-N \stackrel{R^2}{\underset{R^3}{\triangleright}}$$

optionally in protected form, where R² and R³ are as hereinbefore defined, followed by deprotection if required;

- (B) reacting a compound of formula I, where R² and R³ together with the attached nitrogen atom denote a heterocyclyl group substituted by a C₁-C₈-alkoxycarbonyl group, to convert the alkoxycarbonyl group into a carboxy;
- (C) for the preparation of compounds of formula I where R² and R³ together with the attached nitrogen atom denote a heterocyclyl group substituted by carboxy-C₁-C₈-alkoxy, hydrolysing a compound of formula I where R² and R³ together with the attached nitrogen atom denote a heterocyclyl group substituted by C₁-C₈-alkoxy; or
- (D) for the preparation of compounds of formula I when R¹ is phenyl substituted by -SO-C₁-C₈-alkyl, oxidising a compound of formula I where R¹ is phenyl substituted by C₁-C₈-alkylthio; and
- (iv) recovering the product in free or salt form.